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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,682	10/31/2003	Greg Franke	200315010-1	3560
22879	7590	09/29/2005	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			BROUSSARD, COREY M	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/698,682

Applicant(s)

FRANKE ET AL.

Examiner

Corey M. Broussard

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 9 recites the limitation "the second spring" in line 2. Claim 13 recites the limitation "third protrusion" in line 2. Claim 14 recites the limitation "fourth protrusion". There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 5-7, and 18- 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al. (US Pub 2004/0075978). With respect to claim 1, Chen teaches a first slot (42) having an opening and a termination, configured to receive a first protrusion (36) of a media drive (50), and defining a plane of movement for the first protrusion as it travels along a path through the first slot from the opening to the

termination (see Fig. 6); and a first spring (20) disposed adjacent to the termination and operable to engage the first protrusion before it reaches the termination (see [0021]).

5. With respect to claim 2, Chen teaches wherein the first spring (20) comprises a first engagement member (26), disposed at least partially in the path, for engaging the first protrusion (36); and the first engagement member is biased toward the slot and is operable to deflect away from the slot in a direction orthogonal to the plane of movement in response to force applied by the first protrusion (see Fig. 7, [0021]).

6. With respect to claim 3, Chen teaches wherein the first engagement member (26) comprises a substantially flat surface oriented to the path obliquely (see Fig. 7).

7. With respect to claim 5, Chen teaches wherein a resilient finger (43), disposed at the termination, for engaging the first protrusion (43 maintains 20 for contact with the first protrusion 36, and therefore the protrusion is engaged by, or under the influence of the resilient finger 43).

8. With respect to claim 6, Chen teaches wherein the resilient finger (43) is disposed transversely across at least part of the path (see Fig. 4, 7, clearly showing that the finger is raised and therefore disposed transversely from the path).

9. With respect to claim 7, Chen teaches wherein the resilient finger (43) is formed integrally with the material of the media drive cage (see Fig. 4).

10. With respect to claim 18, Chen teaches a means for latching the media drive (50) in the media drive cage (40, retaining means 20 and rail 30 are a means for latching the media drive).

11. With respect to claim 19, Chen teaches wherein the first slot is nonlinear and comprises a first and second low sections disposed at the opening and the termination, respectively (see present Office Action Fig. 1 below, taken from Fig. 4 of Chen),

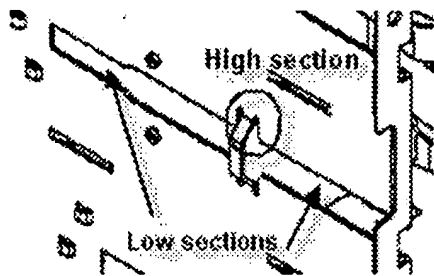


Fig. 1

and a high section disposed between the first and second low sections (see present Office Action Fig.1 above), the high section clearing the profile of the media drive when the media drive is fully inserted in the cage such that air may flow through the high section into or out of the cage, unimpeded by the media drive.

12. With respect to claim 20, Chen teaches wherein the media drive cage (40) comprises more than one identical media drive bays (see Fig. 1).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US Pub 2004/0075978) in view of Hsu et al. (PN 6,813,148). Chen teaches the

device as applied to claim 1 above but lacks specific teaching of wherein the first protrusion comprises a screw head. Hsu teaches a snap locking drive bracket where screw heads (80, col 2, 14-18) are used as protrusions (see Fig. 1-5). It would have been obvious to a person of ordinary skill in the electronic art at the time of the invention to use screw heads as the protrusion of Chen for the benefit of a simple and inexpensive drive bracket assembly.

15. Claims 8-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (US Pub 2004/0075978). With respect to claim 8, Chen lacks specific teaching of a second spring disposed adjacent to the opening and operable to engage the first protrusion as it enters the first slot. It has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. It would be obvious to a person of ordinary skill in the electronic art to duplicate the retaining piece of Chen and position it near the opening of the slot for the benefit of two spring members offering redundant retention of the drive unit better preventing accidental release of the drive unit.

16. With respect to claim 9 as best as it can be understood, Chen teaches the device as applied to claim 5 above, but lacks specific teaching of a second spring. It has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. It would have been obvious to a person of ordinary skill in the electronic art to duplicate the spring (20) and protrusion (36) of Chen having second and third engagement members (25, 26) and position it near the opening of the slot for the benefit of two spring members

offering redundant retention of the drive unit better preventing accidental release of the drive unit.

17. With respect to claim 10, Chen teaches wherein the second and third engagement members comprise substantially flat surfaces oriented to the path obliquely (see Fig. 2), the second engagement member (26) inclined toward a media drive insertion direction and the third engagement member (25) inclined toward a media drive removal direction.

18. With respect to claim 11, Chen lacks specific teaching of the third engagement member engaging the second protrusion when the first protrusion engages the termination. When the obvious rejection of claim 9 is applied, the duplicated features would have to be spaced in such a way to allow simultaneous engagement in order to provide the benefit stated.

19. With respect to claim 12, Chen suggests integrally forming the spring taught (see [0023]). Therefore it would have been obvious to a person of ordinary skill in the art to take the suggestion of integrally formed springs and apply them to the springs of Chen for the benefit of simplifying construction.

20. With respect to claim 13 as best as it can be understood, Chen lacks specific teaching of wherein a second slot is configured to receive and third protrusion of the media drive; and a resilient latch disposed adjacent to the second slot, operable to engage the third protrusion when the first protrusion engages the termination, and operable to retain the media drive in the media drive cage when so engaged. It has been held that mere duplication of the essential working parts of a device involves only

routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. It would have been obvious to a person of ordinary skill in the electronic art to duplicate the slot and spring retainer of Chen so that there would be a snap locking spring retaining mechanism on both lateral sides of the media drive for the benefit of two retaining means offering redundant retention of the drive unit better preventing accidental release of the drive unit.

21. With respect to claim 14 as best as it can be understood, Chen teaches a resilient finger (43), disposed at a termination of a slot, for engaging a protrusion (36) of the media drive (50). Chen lacks specific teaching of a second slot or a fourth protrusion. It has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. It would have been obvious to a person of ordinary skill in the electronic art to duplicate the slot and spring retainer of Chen so that there would be a snap locking spring retaining mechanism on both lateral sides of the media drive for the benefit of two retaining means offering redundant retention of the drive unit better preventing accidental release of the drive unit.

22. With respect to claim 15, Chen lacks specific teaching of wherein the resilient latch comprises molded plastic. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). It would have been obvious to a person of ordinary skill in the electronic

art to select molded plastic as the material for the latch for the benefit of an inexpensive and easily manufactured latch.

23. With respect to claim 16, Chen teaches wherein the resilient latch (duplicate of 20) comprises a hook portion (24-26 of the duplicated parts) and is operable to disengage from the third protrusion in response to a pulling force applied to the hook portion (see [0022]).

24. With respect to claim 17, Chen teaches wherein the resilient latch (duplicate of 20) is disposed adjacent to an opening of the second slot (the latch would inherently have to be adjacent to an opening in the slot to function as taught by Chen).

Conclusion

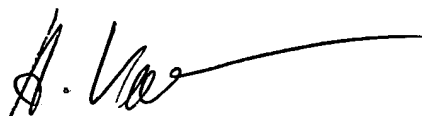
25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Xu (PN 6,853,549) and Chang (PN 6,373,694) demonstrating alternative prior art designs of spring clip/latching drive mounting systems. Justice et al. (PN 6,299,266) and Cooke et al. (PN 5,142,447) demonstrating prior art uses of spring members in drive mounting systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey M. Broussard whose telephone number is 571 272 2799. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 571 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**ANATOLY VORTMAN
PRIMARY EXAMINER**